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Searching PCT (Full Text)...

[Search Summary]

Results of searching in PCT (Full Text) for:

**(piezoelectric or magnetostrictive) near (opposing near polarities) near
(expansion or expand or expands or expanding):** 0 records

Refine Search

(piezoelectric or magnetostrictive) near (opposing ne

No records matching your query found in PCT (Full Text)

Search Summary

opposing NEAR polarities: 265 occurrences in 128 records.

opposing NEAR expansion: 0 occurrences in 0 records.

(opposing NEAR polarities AND opposing NEAR expansion): 0 records.

piezoelectric NEAR opposing: 373 occurrences in 137 records.

piezoelectric NEAR expansion: 0 occurrences in 0 records.

(piezoelectric NEAR opposing AND piezoelectric NEAR expansion): 0 records.

**((opposing NEAR polarities AND opposing NEAR expansion) AND (piezoelectric
NEAR opposing AND piezoelectric NEAR expansion)):** 0 records.

opposing NEAR polarities: 265 occurrences in 128 records.

opposing NEAR expansion: 0 occurrences in 0 records.

(opposing NEAR polarities AND opposing NEAR expansion): 0 records.

magnetostrictive NEAR opposing: 19 occurrences in 10 records.

magnetostrictive NEAR expansion: 0 occurrences in 0 records.

(magnetostrictive NEAR opposing AND magnetostrictive NEAR expansion): 0
records.

**((opposing NEAR polarities AND opposing NEAR expansion) AND
(magnetostrictive NEAR opposing AND magnetostrictive NEAR expansion)):** 0
records.

**((((opposing NEAR polarities AND opposing NEAR expansion) AND (piezoelectric
NEAR opposing AND piezoelectric NEAR expansion)) OR ((opposing NEAR
polarities AND opposing NEAR expansion) AND (magnetostrictive NEAR opposing
AND magnetostrictive NEAR expansion)))):** 0 records.

opposing NEAR polarities: 265 occurrences in 128 records.

opposing NEAR expand: 91 occurrences in 58 records.

(opposing NEAR polarities AND opposing NEAR expand): 1 record.

piezoelectric NEAR opposing: 373 occurrences in 137 records.

piezoelectric NEAR expand: 356 occurrences in 232 records.

(piezoelectric NEAR opposing AND piezoelectric NEAR expand): 19 records.

**((opposing NEAR polarities AND opposing NEAR expand) AND (piezoelectric
NEAR opposing AND piezoelectric NEAR expand)):** 0 records.

opposing NEAR polarities: 265 occurrences in 128 records.

opposing NEAR expand: 91 occurrences in 58 records.

(opposing NEAR polarities AND opposing NEAR expand): 1 record.

magnetostrictive NEAR opposing: 19 occurrences in 10 records.



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Patents Main Page

PATENTS
DATABASE

Search Options

Basic

Number

Boolean

Advanced

Help

Content

Searching

Search Language

FAQ

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Patents

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Search Results 03/16/2005 - 14:08:05

Query :
(((piezoelectric <or> magnetostrictive

Query: (((piezoelectric <or> magnetostrictive) <and> polarity <and>
(expansion <or> expanding <or> expands) <and> (opposite <or>
opposing)))

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VENOUS INSUFFICIENCY USING
DIRECTIONALLY APPLIED ENERGY
2. [2088425](#) PIEZOELECTRIC ELECTRONIC SWITCH 82%
3. [2038894](#) PIEZOELECTRIC SNAP ACTION SWITCH 80%
4. [1309071](#) COMPACT PIEZOELECTRIC FLUIDIC AIR 80%
SUPPLY PUMP
5. [2097668](#) MOVEMENT ACTUATOR/SENSOR 77%
SYSTEMS
6. [2050854](#) HAND HELD FLUID CUTTER 77%
7. [1133066](#) OPTICAL FIBER MEASURING DEVICES 77%
8. [1053363](#) ACCELERATION-INSENSITIVE 77%
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Site Map

Help
What's New

Search
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Registration

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Strategis Index: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)



[CIPO Home](#)

[Patents Main Page](#)

[PATENTS
DATABASE](#)

[Search Options](#)

[Basic](#)

[Number](#)

[Boolean](#)

[Advanced](#)

[Help](#)

[Content](#)

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8. [1053363](#) ACCELERATION-INSENSITIVE HYDROPHONE 77%

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RESULT LIST

10 results found in the Worldwide database for:

piezoelectric or magnetostrictive in the title AND **opposite and polarity and expansion** in the title or abstract
(Results are sorted by date of upload in database)

- 1 Piezoelectric thickness expansion resonator has ratio of distance between each of stimulation electrodes and connecting electrode and thickness of piezoelectric body which is equal to or greater than 2**
 Inventor: KAIDA HIROAKI (JP); NAGAE TORU (JP) Applicant: MURATA MANUFACTURING CO (JP)
 EC: H03H9/17 IPC: H03H9/17
 Publication info: **DE19958957** - 2000-07-06
- 2 Vibrating piezoelectric disc gyrometer or gyroscope appts**
 Inventor: LEGER PIERRE [FR]; JEANROY ALAIN [FR] Applicant: SAGEM [FR]
 EC: G01C19/56P2 IPC: G01C19/56; G01H11/06; (+2)
 Publication info: **DE19605648** - 1997-08-21
- 3 Piezoelectric electronic switch**
 Inventor: ECHOLS JOHN C (US) Applicant: ESSEX ELECTRONICS INC (US)
 EC: B66B1/46D; H03K17/14B; (+1) IPC: B66B1/46; H03K17/14; (+1)
 Publication info: **EP0553881** - 1993-08-04
- 4 Taut band piezoelectric actuator for wire matrix printing elements**
 Inventor: PATTERSON WILLIAM ALEXANDER (US); TONG DIEN HO (US); (+1) Applicant: IBM (US)
 EC: B41J2/295 IPC: B41J2/295
 Publication info: **EP0395924** - 1990-11-07
- 5 PIEZOELECTRIC DISPLACEMENT ELEMENT**
 Inventor: SHIMIZU HIROSHI; YOSHIDA TETSUO Applicant: TOKIN CORP; SHIMIZU HIROSHI
 EC: IPC: H01L41/09
 Publication info: **JP2163982** - 1990-06-25
- 6 PIEZOELECTRIC DISPLACEMENT DEVICE**
 Inventor: TAKEUCHI MASASHI Applicant: JAPAN STORAGE BATTERY CO LTD
 EC: H01L41/09F IPC: H01L41/08; H02N2/00
 Publication info: **JP61183981** - 1986-08-16
- 7 Elimination of magnetic biasing using magnetostrictive materials of opposite strain**
 Inventor: POZZO WILLIAM M [US]; BUTLER JOHN L [US] Applicant: RAYTHEON CO [US]
 EC: B06B1/08B IPC: H04R15/00; H01L41/06
 Publication info: **US4642802** - 1987-02-10
- 8 Tracking device using multiple piezoelectric elements for track centering**
 Inventor: KIMURA KENJI [JP] Applicant: OLYMPUS OPTICAL CO [JP]
 EC: G11B5/58; G11B5/592; (+4) IPC: G11B21/10; G11B21/02
 Publication info: **US4583135** - 1986-04-15
- 9 Circuit arrangement for driving piezoelectric ink jet printers**
 Inventor: KERN HANS [DE] Applicant: SIEMENS AG [DE]
 EC: B41J2/045D; H01L41/04B IPC: H01L41/10
 Publication info: **US4161670** - 1979-07-17
- 10 Improvement in piezoelectric crystal plate and method of fabricating same**
 Inventor: Applicant: BRUSH DEV CO

	Type	L #	Hits	Search Text	DBs
1	BRS	L1	14	piezoelectric same opposite adj1 expan\$4	USPAT
2	BRS	L2	9	piezoelectric same opposite adj1 expan\$4	US- PGPUB; USOCR; EPO; JPO; DERWEN T; IBM_TD B
3	BRS	L4	543	piezoelectric same opposi\$3 adj1 direction\$1 same expan\$4	US- PGPUB; USPAT; USOCR; EPO; JPO; DERWEN T; IBM_TD B
4	IS&R	L5	582	(310/357,359).CCLS.	US- PGPUB; USPAT; EPO; JPO; DERWEN T; IBM_TD B